

Kentucky Retirement Systems

Public Pension Oversight Board

Data as of December 31, 2020



FY 2021 YTD Highlights

Asset levels in all 10 plans rose a total of \$2.5B in the first 6 months of FY 2021

Contributors:

| (\$ in Millions) | Cont less Ben./Exp. | Investment Income | Investment Gains | Total Increase |
|------------------|-------------------------------|----------------------|---------------------|-------------------|
| KERS | \$38(1) | \$40 | \$577 | \$655 |
| CERS | (\$139) ₍₂₎ | \$111 | \$1,780 | \$1,752 |
| SPRS | (\$2) | \$4 | \$60 | \$62 |
| Total | (\$103) | \$155 | \$2,417 | \$2,469 |

⁽¹⁾ KERS Pension Contributions \$565M; Benefit Payment and Expenses \$554m

Sources of Funding:

| | Typical Pension (1) | KERS NH 10 Year | CERS NH 10 Year |
|------------------------|---------------------|-----------------|-----------------|
| Employee Contributions | 12% | 15% | 25% |
| Employer Contributions | 27% | 77% | 55% |
| Investments | 61% | 8% | 20% |

(1) Source: NASRA 1990-2019

⁽²⁾ CERS Pension Contributions \$427M; Benefit Payment and Expenses \$575M

Pension - Investment Update 12/31/20

| | Net of Fees Rates of Return | | | | | | | |
|-----------------------|---------------------------------------|--------|--------|---------|---------|----------|----------|----------|
| *SYSTEMS" | Market Value (in \$millions) | FYTD | 1 Year | 3 Years | 5 Years | 10 Years | 20 Years | 30 Years |
| KERS Non-Hazardous | \$2,615.4 | 12.78% | 9.93% | 7.21% | 8.38% | 7.21% | 5.97% | 8.31% |
| Plan Index | | 12.59% | 8.59% | 6.71% | 8.35% | 7.25% | 5.99% | 8.25% |
| KERS Hazardous | \$794.8 | 14.35% | 9.37% | 7.27% | 9.11% | 7.46% | 6.10% | 8.40% |
| Plan Index | | 14.51% | 9.27% | 7.04% | 8.97% | 7.49% | 6.11% | 8.33% |
| CERS Non-Hazardous | \$7,944.5 | 14.47% | 9.27% | 7.31% | 9.18% | 7.47% | 6.10% | 8.40% |
| Plan Index | | 14.51% | 9.27% | 7.04% | 8.99% | 7.49% | 6.11% | 8.33% |
| CERS Hazardous | \$2,688.4 | 14.46% | 9.20% | 7.29% | 9.16% | 7.47% | 6.10% | 8.40% |
| Plan Index | | 14.51% | 9.27% | 7.04% | 8.98% | 7.49% | 6.11% | 8.33% |
| SPRS | \$321.8 | 12.50% | 9.40% | 7.04% | 8.44% | 7.09% | 5.91% | 8.28% |
| Plan Index | | 12.59% | 8.59% | 6.65% | 8.48% | 7.24% | 5.98% | 8.25% |

Insurance - Investment Update 12/31/20

Net of Fees Rates of Return

| SYSTEMS | Market Value (in \$millions) | FYTD | 1 Year | 3 Years | 5 Years | 10 Years | 20 Years | 30 Years |
|-----------------------|---------------------------------------|--------|--------|---------|---------|----------|----------|----------|
| KERS Non-Hazardous | \$1,175.3 | 14.73% | 9.98% | 7.01% | 8.93% | 6.91% | 5.38% | 7.41% |
| Plan Index | | 14.35% | 8.97% | 6.93% | 9.03% | 7.54% | 5.63% | 7.76% |
| KERS Hazardous | \$578.8 | 14.16% | 8.49% | 6.97% | 9.00% | 7.07% | 5.46% | 7.47% |
| Plan Index | | 14.35% | 8.97% | 6.99% | 9.03% | 7.57% | 5.65% | 7.78% |
| CERS Non-Hazardous | \$2,854.4 | 14.17% | 8.60% | 7.15% | 9.13% | 7.15% | 5.50% | 7.49% |
| Plan Index | | 14.35% | 8.97% | 6.98% | 9.02% | 7.59% | 5.66% | 7.78% |
| CERS Hazardous | \$1,476.2 | 14.19% | 8.49% | 7.17% | 9.17% | 7.18% | 5.51% | 7.50% |
| Plan Index | | 14.35% | 8.97% | 6.98% | 9.01% | 7.59% | 5.66% | 7.78% |
| SPRS | \$226.1 | 14.41% | 9.15% | 7.35% | 9.27% | 7.22% | 5.54% | 7.52% |
| Plan Index | | 14.35% | 8.97% | 6.98% | 9.01% | 7.59% | 5.66% | 7.78% |



Pension Fund Contribution Report (KERS Non Hazardous, KERS Hazardous & SPRS) December 31, 2020 (compared to December 31, 2019) (\$ in millions)

| SYSTEMS | NON-HAZARDOUS | | HAZARDOUS | | SPRS | |
|-------------------------------------|---------------|-----------|-----------|---------|---------|---------|
| Contributions | FY21 | FY20 | Fy21 | FY20 | FY21 | FY20 |
| Member Contributions | \$44.2 | \$51.8 | \$10.2 | \$9.4 | \$2.4 | \$2.4 |
| Employer Contributions | 478.8 | 520.5 | 31.3 | 32.5 | 29.5 | 33.5 |
| Net Investment Income | 21.2 | 22.3 | 6.3 | 7.2 | 2.7 | 3.0 |
| Contribution Inflows | 544.2 | 594.6 | 47.8 | 49.1 | 34.6 | 38.9 |
| Benefit Payments/Refunds | 508.8 | 505.9 | 38.8 | 37.7 | 31.7 | 31.1 |
| Administrative Expenses | 5.4 | 5.6 | 0.6 | 0.6 | 0.1 | 0.1 |
| Contribution Outflows | 514.2 | 511.5 | 39.4 | 38.3 | 31.8 | 31.2 |
| NET Contributions | 30.0 | 83.1 | 8.4 | 10.8 | 2.8 | 7.7 |
| Realized and Unrealized Gain/(Loss) | 274.1 | 89.8 | 93.3 | 30.8 | 33.0 | 11.4 |
| Change in Net Position | 304.1 | 172.9 | 101.7 | 41.6 | 35.8 | 19.1 |
| Beginning of Period | 2,362.2 | 2,286.6 | 697.3 | 687.9 | 295.0 | 287.2 |
| End of Period | \$2,666.3 | \$2,459.5 | \$799.0 | \$729.5 | \$330.8 | \$306.3 |



Pension Fund Contribution Report (CERS-Non Hazardous and CERS-Hazardous) December 31, 2020 (compared to December 31, 2019) (\$ in millions)

| SYSTEMS | CE | ARDOUS | HAZARDOUS | | |
|-------------------------------------|-----------|-----------|-----------|-----------|--|
| Contributions | FY21 | FY20 | FY21 | FY20 | |
| Member Contributions | \$79.0 | \$81.9 | \$31.8 | \$32.4 | |
| Employer Contributions | 226.9 | 226.4 | 88.9 | 84.8 | |
| Net Investment Income | 61.3 | 73.9 | 20.5 | 25.1 | |
| Contribution Inflows | 367.2 | 382.2 | 141.2 | 142.3 | |
| Benefit Payments/Refunds | 417.2 | 403.6 | 146.1 | 137.9 | |
| Administrative Expenses | 10.5 | 10.6 | 0.9 | 1.0 | |
| Contribution Outflows | 427.7 | 414.2 | 147.0 | 138.9 | |
| NET Contributions | (60.5) | (32.0) | (5.8) | 3.4 | |
| Realized and Unrealized Gain/(Loss) | 949.5 | 325.3 | 320.8 | 107.9 | |
| Change in Net Position | 889.0 | 293.3 | 315.0 | 111.3 | |
| Beginning of Period | 7,110.9 | 7,243.0 | 2,395.7 | 2,429.6 | |
| End of Period | \$7,999.9 | \$7,536.3 | \$2,710.7 | \$2,540.9 | |



Insurance Fund Contribution Report (KERS Non-Haz, KERS Haz & SPRS) December 31, 2020 (compared to December 31, 2019) (\$ in millions)

| SYSTEMS | NON-HAZARDOUS | | HAZARDOUS | | SPRS | |
|--------------------------------------|---------------|-----------|-----------|---------|---------|---------|
| Contributions | FY21 | FY20 | FY21 | FY20 | FY21 | FY20 |
| Employer Contributions | \$77.1 | \$86.1 | - | \$2.2 | \$4.7 | \$6.8 |
| Insurance Premiums | 17.3 | 0.1 | 1.3 | - | 0.8 | - |
| Retired Reemployed Healthcare | 2.2 | 2.2 | 0.6 | 0.6 | - | - |
| Health Insurance Contributions (HB1) | 3.2 | 3.0 | 0.5 | 0.5 | 0.1 | 0.1 |
| Net Investment Income | 8.9 | 10.4 | 3.9 | 5.4 | 1.4 | 2.0 |
| Contribution Inflow | 108.7 | 101.8 | 6.3 | 8.7 | 7.0 | 8.9 |
| Healthcare Premiums | 64.2 | 61.7 | 10.1 | 9.7 | 7.4 | 7.1 |
| Administrative Expenses | 0.4 | 0.4 | - | - | - | - |
| Contribution Outflow | 64.6 | 62.1 | 10.1 | 9.7 | 7.4 | 7.1 |
| NET Contributions | 44.1 | 39.7 | (3.8) | (1.0) | (0.4) | 1.8 |
| Realized and Unrealized Gain/(Loss) | 140.8 | 41.9 | 68.3 | 22.5 | 27.2 | 8.8 |
| Change in Net Position | 184.9 | 81.6 | 64.5 | 21.5 | 26.8 | 10.6 |
| Beginning of Period | 1,006.5 | 942.1 | 514.7 | 527.1 | 200.2 | 200.1 |
| Ending of Period | \$1,191.4 | \$1,023.7 | \$579.2 | \$548.6 | \$227.0 | \$210.7 |



Insurance Fund Contribution Report (CERS Non Hazardous and CERS Hazardous) December 31, 2020 (compared to December 31, 2019) (in \$millions)

| SYSTEMS | NON-HAZ | ARDOUS | HAZARDOUS | |
|--------------------------------------|-----------|-----------|-----------|-----------|
| Contributions | FY21 | FY20 | FY21 | FY20 |
| Employer Contributions | \$59.8 | \$59.3 | \$30.2 | \$28.6 |
| Insurance Premiums | 21.0 | 0.3 | 3.0 | - |
| Retired Reemployed Healthcare | 2.7 | 2.7 | 0.6 | 0.6 |
| Health Insurance Contributions (HB1) | 6.4 | 6.1 | 1.6 | 1.4 |
| Net Investment Income | 19.3 | 24.9 | 9.5 | 13.1 |
| Contribution Inflows | 109.2 | 93.3 | 44.9 | 43.7 |
| Healthcare Premiums | 73.1 | 67.4 | 42.1 | 40.0 |
| Administrative Expenses | 0.4 | 0.4 | 0.2 | 0.2 |
| Contribution Outflows | 73.5 | 67.8 | 42.3 | 40.2 |
| NET Contributions | 35.7 | 25.5 | 2.6 | 3.5 |
| Realized and Unrealized Gain/(Loss) | 334.7 | 111.4 | 174.5 | 58.3 |
| Change in Net Position | 370.4 | 136.9 | 177.1 | 61.8 |
| Beginning of Period | 2,498.0 | 2,486.5 | 1,305.1 | 1,324.8 |
| End of Period | \$2,868.4 | \$2,623.4 | \$1,482.2 | \$1,386.6 |